

## REMARKS/ARGUMENTS

This paper is responsive to an Office Action mailed April 21, 2008 in which claims 1-30 were pending and examined and rejected. Applicants have amended all independent claims 1, 12, 25 and 26 and left claims 2-11, 13-24, and 27-30 pending under active prosecution. Applicants assert that the amendments are supported by the original specification and do not introduce new subject matter. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

### **I. Rejection of Claims 1-25 and 27-30 Under 35 U.S.C. §103(a)**

The Office Action states that claims 1-25 have been rejected under 35 U.S.C. 103(a) as allegedly unpatentable with respect to Sovio et al. (“Sovio”; US Pat. Publ. No. 2005/0059379) in view of Moskowitz et al. (“Moskowitz”; US 7,035,650). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. The combination of Sovio and Moskowitz fails to teach all of the claim limitations.

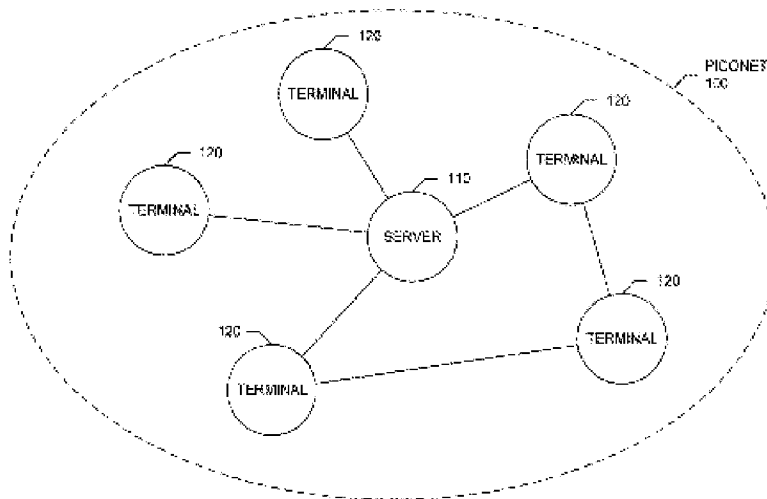
Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. *See KSR v. Teleflex*, 550 U.S. \_\_\_, 127 S. Ct. 1727 (2007) *citing In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006) (“***[R]jections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness***”).

A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning. *See KSR v. Teleflex*, 550 U.S. \_\_\_, 127 S. Ct. 1727 (2007) *citing Graham v. John Deere Co. of Kansas City*, 383 U. S. 1, 36 (warning against a “temptation to read into the prior art the teachings of the invention in issue” and instructing courts to “guard against slipping into the use of hindsight” (*quoting Monroe*

*Auto Equipment Co. v. Heckethorn Mfg. & Supply Co.*, 332 F. 2d 406, 412 (CA6 1964))).

Turning to independent claim 1, the claim recites a user interface configured to transmit and receive communications during a call with a first terminal connected to an ad hoc network *backbone*; and a processor configured to *support an inter-cluster call* between second and third terminals by *establishing a route on the ad hoc network backbone* for each communication packet transmitted from the second terminal to the third terminal. To further clarify the meaning of the limitations of a “backbone” and “inter-cluster”, the claim has been amended to recite that *the ad hoc network comprises two clusters, each cluster comprising at least one member terminal slaved to a master terminal, and an inter-cluster link formed by an intra-cluster bridge terminal that is a member of both clusters*. The amendment is supported at least by the disclosure of Paras. [0020]-[0022] and [0037], the latter describing FIG. 5.

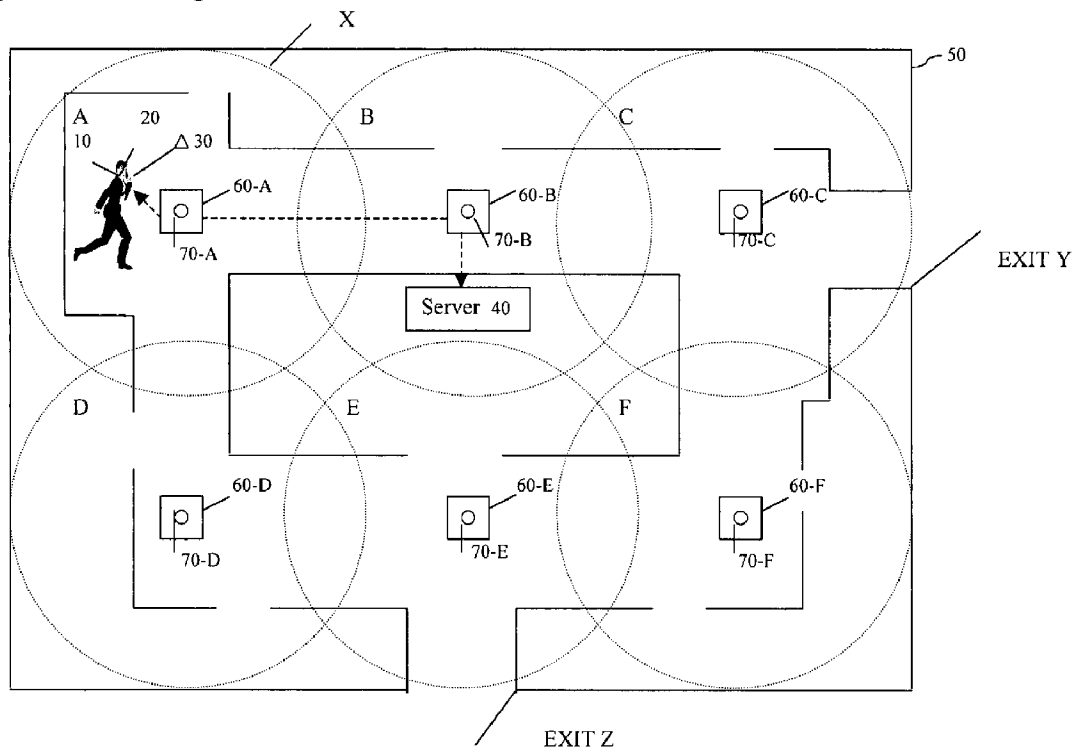
In rejecting claim 1, the Examiner relied upon Sovio at Para. [0022], line 1 to Para. [0023], line 5 to teach an ad hoc network backbone. This excerpt is describing FIG. 1:



This excerpt depicts a single cluster and thus no backbone is taught or suggested to facilitate inter-cluster calls. In particular, no intra-cluster bridge terminal that provides an inter-cluster link is taught. As clearly annotated on the figure, a single piconet is depicted, not an ad hoc network formed from multiple piconets (cluster).

First, a prior art reference must be considered in its entirety, *i.e.*, as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). Moreover, the Federal Circuit has held that teaching away from the art of the subject invention is a *per se* demonstration of lack of *prima facie* obviousness. *In re Dow Chemical Co.*, 837 F.2d 469, 5 USPQ2d 1529 (Fed. Cir. 1988). Consequently, insofar as Sovio teaches away from use of a network backbone in an ad hoc network, it cannot be properly combined to overcome the deficiencies in the other cited references.

The Examiner did rightfully acknowledge that Sovio did not teach “[s]upporting an inter-cluster call between second and third terminals.” For this feature, the Examiner relied upon the teaching of Moskowitz at FIG. 1; Col. 3, lines 27-35; Col. 4, lines 6-14, 40-54:



However, Applicants assert that what Moskowitz is teaching conventional network connectivity between server 40 and fixed communication devices 60. There is no teaching or suggestion or enablement provided for inter-cluster calls between terminals of an ad hoc network. The server 40 tracks location of a user 10 that is moving the piconet between

Bluetooth region (dashed lines) of each Bluetooth chip 70 and responds to questions to the user 10 via the Bluetooth chip 70. However, the network does not facilitate an inter-cluster call between separate user's mobile wireless communication devices 20 that are in different Bluetooth regions. Even if the server 40 was configured to facilitate a call between two different terminals (i.e., wireless communication devices 20), there is not an intra-cluster bridge terminal that provides an inter-cluster link between fixed communication devices 60 as claimed as being a member of both ad hoc networks, and thus Moskowitz does not correct for the deficiencies of Sovio.

Consequently, the cited references fail to teach or suggest all of the limitations of the claimed invention and thus a prima facie case for obviousness has not been made. Reconsideration and allowance of claim 1 is respectfully requested, as well as claims 2-11 and 27-28 that depend there from.

Turning to independent claim 12, the claim recites features in method form discussed above with regard to claim 1. The claim was amended identically to claim 1 to also clarify the limitations of "backbone" and "inter-cluster calls." Since claim 12 was rejected on the same basis as claim 1, for at least the same reasons claim 12 is patentable over the cited references. Reconsideration and allowance of claim 12 is respectfully requested, as well as claims 13-24, 29 and 30 that depend there from.

Turning to independent claim 25, the claim recites means for a user to participate in a call with a first terminal connected to an ad hoc network backbone; and means for establishing a route on the ad hoc network backbone for each communication packet transmitted from a second terminal to a third terminal during an inter-cluster call. The claim was amended identically to claim 1 to also clarify the limitations of "backbone" and "inter-cluster calls." Since claim 25 was rejected on the same basis as claim 1, for at least the same reasons as given above for claim 1, reconsideration and allowance of claim 25 is respectfully requested.

Applicants wish to point out that new independent claim 31 recites features of claims 1, 12 and 25 directed to at least one processor. New independent claim 32 recites features of claims 1, 12, and 25 directed to a computer program product.

## **II. Rejection of Claims 26-30 Under 35 U.S.C. §103(a)**

Claims 26-30 was rejected under 35 U.S.C. 103(a) as being unpatentable with respect to Sovio in view of Moskowitz, in further view of Juitt et al. (“Juitt”; US 7,042,988). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. The combination of Sovio, Moskowitz and Juitt fails to teach all of the claim limitations.

In addition to reciting an ad hoc network backbone, the claim recites in part a method wherein designating one of the terminals in the cluster as a backup server terminal when a failure is detected of a primary server terminal. The claim has been amended identically as discussed above to clarify the limitations of “backbone” and “inter-cluster calls”

In rejecting claim 26, the Examiner relied upon Sovio and Moskowitz as discussed above. For the reasons given above for claim 1, claim 26 should be patentable over the cited references. The Examiner did rightfully acknowledge that Sovio and Moskowitz failed to teach or suggest “detecting a server terminal failure, relying then upon Juitt at Col. 5, lines 5-25; Col. 17, lines 14-37.

The claim has been further amended to recite in part *dynamically* designating one of the terminals in the cluster as a backup server terminal *in accordance to an ad hoc protocol*. The claim amendment clarifies that designation of a backup server terminal has to be dynamic as required by the nature of an ad hoc network. By contrast, Juitt teaches a wireless network that has predetermined configuration of access gateways, one being defined as primary with a predetermined backup. As such, Juitt does not teach an enabling disclosure to address the problem of an ad hoc network in which an ALR server fails within a particular cluster that is

dynamically changing. Consequently, Juitt fails to teach or suggest the additional limitation. Reconsideration and allowance of claim 26 is respectfully requested.

Turning to the rejection of claim 27 that depends from claim 1 and claim 29 that depends from claim 12, Applicants understand that the rejection is made on the same basis as their base claims (i.e., Sovio in view of Moskowitz), relying upon Moskowitz at FIG. 1; Col. 2, lines 19-25; Col. 4, lines 6-14, 40-54 to teach their additional recited features. This same excerpt was discussed above with regard to the base claims. In particular, Moskowitz does not teach an ad hoc network backbone nor inter-cluster calls, and thus Moskowitz fails to correct the deficiencies in the primarily cited reference of Sovio to teach or suggest the additional claimed feature. Reconsideration and allowance is respectfully requested for claims 27 and 29, as well as claims 28 and 30 that depend respectfully there from.

With further reference to claims 28 and 30, Applicants understand that these claims are rejected based on Sovio in light of Moskowitz, relying up on the latter to teach that the inter-cluster bridge terminals are address, location and route (ALR) servers at Col. 2, lines 19-25; Col. 4, lines 6-14, 40-54. As discussed above, Moskowitz does not teach an ad hoc network backbone between fixed communication devices 60, but at most a conventional network connection between each individual fixed communication device 60 and the server 40. Considering for the sake of argument that the Bluetooth chip 70 of Moskowitz can be construed to perform the role of a cluster ALR server, Moskowitz fails to teach or suggest routing a call between two Bluetooth chips 70. Thus, for at least these additional reasons, the cited references fail to render the additional features of claims 28 and 30 unpatentable. Reconsideration and allowance is respectfully requested.

Applicants wish to point out that new independent claims 33-36 recite features of claim 26 directed respectively to at least one processor, a computer program product, a means-plus-function apparatus, and an apparatus.

### CONCLUSION

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Dated June 16, 2008

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